

## Title (en)

Compound mixtures based on sulphur containing amino acids, antioxidants, phospholipids and vitamins for the preparation of a medicament for treating L-diabetes and/or associated diseases.

## Title (de)

Stoffgemische basierend auf schwefelhaltigen Aminosäuren, Antioxidantien, Phospholipiden und Vitaminen zur Herstellung eines Arzneimittels für die Behandlung des L-Diabetes und/oder assoziierter Erkrankungen

## Title (fr)

Mélanges de substances contenant des acides aminés sulfurés, des antioxidants, des phospholipides et des vitamines pour la préparation d'un médicament pour le traitement du diabète de type L ou/et des maladies associées.

## Publication

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## Application

**EP 04026785 A 20041111**

## Priority

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## Abstract (en)

A medicament (A) for treating L-diabetes and associated diseases consists of the following partial medicaments: (1) agents for improving sulfur-utilizing conjugation, e.g. N-acetylcysteine; (2) antiradical agents, e.g. vitamin C; (3) agents for supplying phospholipids and their components, e.g. lecithin; (4) agents for supplying fat-soluble vitamins and essential fatty acids, e.g. vitamin A; (5) agents for supplying vitamins and trace elements, e.g. zinc ions; and (6) dexpantenol as agent for alleviating inflammation and atrophy of the small intestinal mucosa. The use of various materials is claimed for the production of a medicament (A) for the treatment of L-diabetes and associated diseases, where (A) consists of a combination of partial medicaments, themselves consisting of combinations of individual materials strictly oriented towards the patho-physiological concept of L-diabetes. The partial medicaments are: (1) agents for improving sulfur-utilizing conjugation, comprising N-acetylcysteine and/or one or more of glutathione, taurine, L-cystine, L-methionine, L-lysine and S-adenosyl-L-methionine; (2) antiradical agents selected from vitamin C, injectable vitamin E preparations, beta -carotene, alpha -lipoic acid, selenium, manganese, rutoside, hesperidin, silibinin and silymarin; (3) agents for combating insufficient supply of phospholipids and phospholipid components, selected from lecithin and/or one or more of cephalin, phosphatidyl inositol and choline (or its orotate, chloride, citrate and/or hydrogen tartrate); (4) agents for combating insufficient supply of fat-soluble vitamins and essential fatty acids, comprising as many as possible of vitamin A, vitamin D, omega -3 fatty acids and omega -6 fatty acids, optionally together with an extract of *Rhizoma Curcumae xanthorrhizae* as cholagogue for improving fat resorption; (5) agents for combating loss of vitamins and trace elements as a result of excessive bacterial colonization of the small intestine, comprising as many as possible of zinc ions and injectable vitamin B1, vitamin B2, vitamin B6, vitamin B12 and folic acid preparations; and (6) an agent for alleviating inflammation and atrophy of the small intestinal mucosa comprising dexpantenol. One of these partial medicaments is optionally omitted. **ACTIVITY** : Antidiabetic; Neuroprotective; Ophthalmological; Vasotropic; Hepatotrophic; Hypotensive. **MECHANISM OF ACTION** : Sulfur-utilizing conjugation promoter; antiradical; phospholipid source; fat-soluble vitamin and essential fatty acid source; vitamin and trace element source.

## Abstract (de)

Die Erfindung ist charakterisiert durch die Verwendung von Substanzen zur Herstellung eines Arzneimittels für die Behandlung des L-Diabetes und/oder assoziierter Erkrankungen. Der L-Diabetes wird definiert als Teil des nicht-autoimmunopathischen und - nach manifester Erkrankung - nicht-adipösen Diabetes mellitus, der charakterisiert ist durch einen zentralnervös falsch niedrig gemessenen Ist-Wert der Blutglucose. Diese Falschmessung entsteht im ZNS durch die Abnahme der intra-/extrazellulären ATP-Konzentration, die nicht durch eine Abnahme der Blutglucose verursacht, aber als solche interpretiert wird. Als Ursachen, die über eine kausale Verkettung die Minderung der cerebralen ATP-Bereitstellung bewirken, werden UGT1-Defekte, ein empfindliches sympathisches System, ein IgM-Defizit und Reaktionen auf unverträgliche Nahrungsmittel postuliert. Das Arzneimittel ist eine Kombination aus sechs Teilarzneimitteln, wobei die Stoffauswahl strikt anhand des pathogenetischen Kausalkonzepts des L-Diabetes getroffen wird, zur Besserung der dort deklarierten pathophysiologischen Zustände. Verwendet werden Substanzen gegen die Verminderung der Phase II-Konjugationen (schwefelhaltige Aminosäuren) sowie Stoffe, die der Abnahme der ATP-Erzeugung und dem Nachlassen der neuralen Funktionen entgegenwirken (Antioxidantien, Phospholipide und Vitamine).

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- [X] EP 0768043 A2 19970416 - BRISTOL MYERS SQUIBB CO [US]
- [X] US 2003134851 A1 20030717 - BAXTER JEFFREY H [US], et al
- [X] WO 9841113 A2 19980924 - SIGMA TAU IND FARMACEUTI [IT]
- [A] WO 03024487 A1 20030327 - NUTRICIA NV [NL]
- [DA] US 2003078269 A1 20030424 - PEARSON DON C [US], et al
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